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RE: 2015 Dietary Guidelines Advisory Committee Public Comments

The [International Food Information Council \(IFIC\)](#) and [IFIC Foundation](#) appreciate the opportunity to submit comments to the 2015 Dietary Guidelines Advisory Committee (DGAC). Our ensuing comments are constructed with the 2010 DGAC "Needs for Future Research" in mind. We believe our years of consumer research and related peer-reviewed articles will be of great value to the DGAC in supporting innovative ways to motivate the American public toward more healthful lifestyles and behaviors.

IFIC and IFIC Foundation are nonprofit organizations based in Washington, DC. The mission of IFIC is to effectively communicate science-based information about food safety and nutrition to health professionals, government officials, educators, journalists, and consumers. The mission of the IFIC Foundation is to effectively communicate science-based information about health, nutrition and food safety for the public good. Both IFIC and the IFIC Foundation receive primary funding from food, beverage and agricultural companies that support our missions. We also receive government grants and contributions from other individuals, foundations and associations.

IFIC and IFIC Foundation consumer research has been exploring Americans' attitudes toward nutrition and health for more than two decades with our signature research project being the annual IFIC Foundation *Food & Health Survey*. We are dedicated to providing consumers with clear, accurate advice and actionable tips on how science-based information related to nutrition, health, and food safety can be applied to their daily lives.

EATING PATTERNS-DIETS & MICRONUTIENTS

RESEARCH NEED ADDRESSED:

The 2010 DGAC identified the following research need related to micronutrients:

1. Understand how the food environment facilitates or hinders achievement of food groups and dietary components recommendations.

**The following comments are relevant to both the Eating Patterns-Diets and Micronutrient topic areas*

RELEVANCE:

Understanding the broad spectrum of food processing and technology used in the development of healthful foods that align with dietary guidance is critical.

FOR NUTRITION EVIDENCE LIBRARY (NEL) CONSIDERATION:

Dwyer JT, Fulgoni VL, Clemens RA, Schmidt DB, Freedman MR. [Is “Processed” a Four-Letter Word? The Role of Processed Foods in Achieving Dietary Guidelines and Nutrient Recommendations](#). *Adv. Nutr.* 2012; 3: 1–13.

Description: This joint publication of the Academy of Nutrition & Dietetics, American Society for Nutrition, Institute of Food Technologists, and IFIC provides insights on the roles of processed foods for micronutrient intake.

KEY POINTS:

- Results from NHANES 2003-2006 data indicate that fresh fruits and vegetables contribute significant amounts of vitamin A, fiber, and folate to the American diet, whereas processed fruits and vegetables contribute significant amounts of vitamins E and C and potassium.
- Processed fruits and vegetables provide significant amounts of shortfall nutrients (fiber, folate, and potassium) and significant amounts of vitamins A and C in Americans’ diets. Consumption of processed fruits and vegetables supports eating plans described in the Dietary Guidelines for Americans.
- Results from IFIC’s consumer research on processed foods (IFIC, 2010) found that consumer perceptions of “processed” foods were mostly negative.
- Ninety-five percent of respondents reported that taste was extremely important or very important, indicating that they are not interested in consuming healthful foods if they do not also taste good.
- Many consumers perceive processed foods as providing good value and associate them with numerous positive attributes, including convenience, availability year-round, and consistency/quality.

FOR NUTRITION EVIDENCE LIBRARY (NEL) CONSIDERATION:

Eicher-Miller H, Fulgoni V, Keast D. [Contributions of processed foods to dietary intake in the US from 2003-2008 \(A report of the Food and Nutrition Science Solutions Joint Task Force of the Academy of Nutrition and Dietetics, American Society for Nutrition, Institute of Food Technologists, and International Food Information Council\)](#). *The Journal of Nutrition*, 2012; 142: 2065S-2072S.

Description: This study commissioned by the Academy of Nutrition & Dietetics, American Society for Nutrition, Institute of Food Technologists and the IFIC examined the contributions of processed foods to total dietary intakes of nutrients to encourage and food components to reduce, and found that the level of food processing is not a major determinant of foods’ nutrient contributions to the diet.

RELEVANCE:

Food processing can add nutrients to the diet to help meet the Dietary Reference Intakes. According to the study, all levels of processing, as defined using the International Food Information Council Foundation's [Understanding Our Food Communications Tool Kit](#) (2010), contributed to nutrient intakes, and no level contributed solely to nutrients to be encouraged or solely to food components to be reduced.

KEY POINTS:

- Nutrient inadequacy and deficiency is prevented for many Americans because of the contributions of processed foods. However, energy-rich and nutrient-poor foods may result when dietary components that have been deemed “food components to reduce” are added to processed foods without adding nutrients or other favorable components.
- Foods of various degrees of processing make significant contributions to the nutrient and energy intake of the U.S. population.
- Processing level was a minor determinant of individual foods’ nutrient contribution to the diet and, therefore, should not be a primary factor when selecting a balanced diet.
 - Proportional contributions of “minimally processed” foods to daily nutrient intake were considerable ($\geq 20\%$) for several micronutrients, despite a proportionally small contribution to daily energy (14%) intake.
 - “Foods processed for preservation” made contributions to daily vitamin C (29%); and despite relatively higher energy contributions, “ready-to-eat processed foods” contributed to daily vitamin C (25%), vitamin D (23%), calcium (23%), and potassium (24%) intake.
 - Many “minimally processed foods” (e.g., milk, fresh fruits, vegetables, and meats) are nutrient-dense and accounted for about 27% of total foods consumed. However, foods in this category, including eggs and meat, also contributed proportionally large amounts to total cholesterol.
 - Each IFIC Foundation processing category contributed proportionally similar amounts of saturated fat and sodium as energy. Foods containing these food components to reduce are found among all categories and cannot be identified by the level of processing.
- Although conclusions for individual dietary components can be made for each category in the aggregate, a clearly “healthy” or “unhealthy” category, as identified by processing level, does not emerge from this analysis.
 - Both ends of the processed-food spectrum make prominent contributions to nutrients to encourage and food components to reduce.
- Given the diversity within each category, it is difficult to objectively rank them on the basis of overall nutritional value. Generalized public health messages or recommendations based on such a ranking would likely be simplistic and/or misleading.
- Level of processing does not have a clear association with the healthfulness of a food as determined by the presence of either “nutrients to encourage” or “food components to reduce,” as specified in the Dietary Guidelines for Americans 2010. A food's nutrient composition and the frequency and amount eaten, should be stressed as the most important considerations for the selection of a healthful diet, rather than level of processing.

EATING PATTERNS-DIETS & MICRONUTRIENTS

RESEARCH NEED ADDRESSED:

The 2010 DGAC identified the following research needs related to eating patterns-diets:

1. Develop and test behavior-based interventions designed to lower dietary intakes of nutrients and dietary components overconsumed.
2. Understand the influence of snacking behavior and meal frequency on body weight and obesity
3. Develop better definitions for snacking as the research moves forward.

**The following comments are relevant to both the Eating Patterns-Diets and Micronutrient topic areas*

RELEVANCE:

Americans consume more sodium than is recommended. The 2010 Dietary Guidelines for Americans recommend Americans to “Reduce daily sodium intake to less than 2,300 milligrams (mg) and further reduce intake to 1,500 mg among persons who are 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease.” Current estimates have the average American consuming about 3,400 milligrams (mg) per day, or about 1.5 times the 2,300 mg that is recommended for healthy individuals, but whether sodium intake in the United States has changed over time is unclear¹. The amount of sodium in the American diet is a primary focus for a key public health initiative to lower blood pressure as a means to reduce risk for cardiovascular disease across the population.

Emerging evidence, however, suggests that low sodium intakes may increase health risks, especially in certain populations. A recent report from the Institute of Medicine (IOM), “Sodium Intake in Populations: Assessment of Evidence²,” reviewed the literature published since 2003, including a range of sodium intake levels between 1,500 mg and 2,300 mg. The IOM report went beyond sodium’s impact on blood pressure to explore the potential for both positive and negative health outcomes with low sodium intake. Evolving research has questioned the role of low sodium intake in increasing risk of heart disease and stroke due to its effect on blood lipids and insulin resistance. While the report did find sufficient evidence to support lowering excessive sodium intake population-wide, the report did not find enough available evidence to support lowering dietary sodium recommendations to 1,500 mg per day for the entire population. Furthermore, according to the IOM report, there is no evidence to support treating population subgroups differently from the general population or to indicate a benefit from lowering sodium below the 2,300 mg per day that is currently recommended—this is a marked difference from the current 2010 Dietary Guidelines for Americans. The IOM report does state, however, that there are limitations in the available data and suggest that a “healthy” sodium intake range could be addressed in future clinical studies.

Communications about sodium and its role in health, must begin to focus more on behaviors and evolve to include more than numbers. Consumers are hearing messages about lowering their sodium, but specific numbers and thresholds do not appear to be sticking. [IFIC 2011 Consumer Sodium Research](#) illustrated that awareness of both sodium recommendations and personal sodium intake is low as almost half (46%) responded that they “don’t know”

¹ Bernstein AM, Willett WC. [Trends in 24-hour urinary sodium excretion in the United States, 1957–2003: a systematic review](#). *Am J Clin Nutr* 2010; 92:1172–1180.

² IOM (Institute of Medicine). 2013. [Sodium intake in populations: Assessment of evidence](#). Washington, DC: The National Academies Press.

how much is recommended for the average, healthy individual. More than half (57%) also responded that they “don’t know” how much sodium they personally consume in one day and almost six in ten (59%) of those with high blood pressure also reported not knowing. Americans are more likely to understand positive messages that involve foods versus just nutrients – like “eat more fruits and vegetables”—as a way to lower sodium and increase potassium intakes.

Results from IFIC consumer research and expert roundtable recommendations support the need to develop broader strategies that recognize holistic lifestyle approaches beyond a sodium focus to successfully lower blood pressure and reduce risk for cardiovascular disease. Positive messaging to consumer and medical professional audiences about weight management, increasing fruit and vegetable intake and physical activity, along with other comprehensive strategies, are needed to encourage more healthful eating patterns and participation in making healthful lifestyle choices.

FOR NUTRITION EVIDENCE LIBRARY (NEL) CONSIDERATION:

Kolasa K, Sollid K, Smith Edge M, Bouchoux A. [Blood Pressure Management: Communicating Comprehensive Lifestyle Strategies Beyond Sodium](#). *Nutrition Today*, 2012; 47(4):183-190.

Description: This article summarizes IFIC consumer research and an expert roundtable discussion that focused on the best ways to prevent or manage high blood pressure through positive diet and lifestyle strategies.

KEY POINTS ADDRESSING RESEARCH NEED #1:

- Healthcare professionals and researchers agree that more work is needed to understand ways to encourage healthful lifestyle counseling sessions for all patients at risk for or with hypertension.
- Hypertensive patients receive little information on the beneficial lifestyle changes for reducing hypertension during visits with their physician.
- The DASH dietary pattern has been shown to complement sodium restriction and weight loss, but few Americans with hypertension have diets even modestly accordant with DASH, and perhaps secular trends have minimized the impact of the DASH message over time.
- Both consumers and experts are optimistic that lifestyle strategies can work.
- Messages need to be targeted to both consumers and medical professionals.
- A holistic approach beyond sodium reduction is needed to manage high blood pressure to reduce risk of cardiovascular disease.

KEY POINTS FROM IFIC FOUNDATION *FOOD AND HEALTH SURVEY* ADDRESSING RESEARCH NEED #1:

- Six out of ten Americans try to limit or avoid sodium and the most common reasons for Americans to consider the sodium content of their foods are to prevent a future health condition, reduce their risk of heart disease, and improve overall health.
- Three quarters of Americans know that sodium can act as a preservative in foods and beverages.